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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/517,732 | 03/02/2000 | Kunio Imai | 041514-5072 | 4972 |

9629 7590 07/23/2002

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EXAMINER

QUARTERMAN, KEVIN J

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 07/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/517,732

Applicant(s)

IMAI, KUNIO

Examiner

Kevin Quarterman

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-15 and 17-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-15 and 17-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 07 May 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 07 May 2002 have been approved.

Specification

2. Amendment A, filed 07 May 2002, overcomes the objections to the specification in the previous office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 21-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding newly added independent claims 21 and 29, the word "means" is preceded by the word(s) "gate" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

6. Because claims 22-28 and 30-37 depend upon independent claims 21 and 29, they are also deemed indefinite.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3-5, 7-10, and 21-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (USPN 6100954).

9. Regarding independent claim 1, Figure 10G of Kim et al. shows an organic switching element comprising an insulative film (157) and an organic semiconductor layer (159) mounted on the insulative film, a pair of opposing electrodes (113, 131) sandwiching the insulative film and the organic semiconductor layer, and source and drain electrodes (123, 127) disposed between the organic thin film and the insulative film.

10. Regarding claims 3-5 and 7-10, Kim et al. disclose the organic thin film is made of an organic material such as fluorinated polyimide, Teflon, cytop, fluoropolyarylether, or fluorinated parylene.

11. Regarding newly added claims 21-28, Kim et al. disclose the switching element described above for claims 1, 3-5, and 7-10.

12. The Examiner notes that the claimed functional properties of the organic semiconductor layer are not positive limitations but only requires the ability to perform the function. They do not constitute limitations in any patentable sense.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 11-15, 17-20, and 29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's prior art Figures 1 and 2 in view of Kim et al., as applied to claims 1-10 above.

15. Regarding independent claim 11, prior art Figure 1 shows an organic electroluminescent element including a substrate (1) having a first display electrode (201), an organic layer (202) formed on the first display electrode, and a second display electrode (203) formed on the organic material layer.

16. Applicant's admitted prior art Figure 1 teaches the claimed invention except for an organic thin-film switching element having an organic semiconductor layer mounted on an insulative film being connected to the first or second electrode.

17. Kim et al., also regarding claims 17-20, teach the organic thin-film switching element, as described above for claims 1-10. Kim et al. disclose that the organic film achieves high quality contrast and provides an LCD with superior quality and performance (col. 22, ln. 13-32).

18. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the organic electroluminescent element of applicant's prior art Figure 1 with an organic thin-film switching element, as taught by

Art Unit: 2879

Kim et al., for providing a highly efficient, high luminance, and longer life full color display.

19. Regarding claim 13, applicant admits that a plurality of organic EL elements is arranged in a matrix (pg. 1, ln. 14-16).

20. Regarding claim 14, prior art Figure 2 shows a capacitor (C) formed on the substrate and connected to the first or second display electrodes.

21. Regarding claim 15, applicant admits that the substrate and the first display electrode are transparent (Page 1, Lines 18-20).

22. Regarding newly added claims 29-37, applicant's prior art figures and Kim et al. disclose the organic electroluminescent element and organic thin-film switching element described above for claims 11-15 and 17-20.

Response to Arguments

23. Applicant's arguments filed 07 May 2002 have been fully considered but they are not persuasive.

24. In response to applicant's argument that the organic thin film of Kim et al. does not function as a semiconductor layer and that the pixel electrode of Kim et al. is not a gate electrode, it is elementary that the mere recitation of a newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to distinguish over the prior art. Additionally, where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it

possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

26. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (703) 308-6546. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703) 305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Kevin Quarterman
Examiner
Art Unit 2879

kq 
July 18, 2002


Vip Patel
Primary Examiner
Art Unit 2879